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(54) Title: STRUCTURAL BASIS FOR PTERIN FUNCTION IN NITRIC OXIDE SYNTHASE

(57) Abstract

This invention describes methods and elucidates the three dimensional structure of nitric oxide synthase and its variants. Also described are methods of structural analysis to determine the binding of pterin to endothelial nitric oxide synthase and methods for screening and identifying small molecule modulators of endothelial nitric oxide synthase proteins and their variants. The invention also describes methods for identifying drugs that modulate nitric oxide synthase and its variants and are effective against diseased states in which NO signaling is defective or insufficient.